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57. A polypeptide according to claim 55, having an amino acid sequence which is derived from the sequence of the IM2394 type Tbp2 subunit whose first, second and third domains are defined by maximal homology alignment with the sequence of the Tbp2 subunit of reference strain IM2394, by total deletion of the third domain and by partial or total deletion of the second domain of said IM2394 type Tbp2 subunit.

58. A polypeptide according to claim 57, having an amino acid sequence which is derived from the sequence of the IM2394 type Tbp2 subunit whose first, second and third domains are defined by maximal homology alignment with the sequence of the Tbp2 subunit of reference strain IM2394, by total deletion of the third domain, by partial or total deletion of the second domain of said IM2394 type Tbp2 subunit and which contains in full the first domain of the sequence from which it is derived.

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59. A polypeptide according to claim 57, having an amino acid sequence which is further derived from the sequence of the IM2394 type Tbp2 subunit whose first, second and third domains are defined by maximal homology alignment with the sequence of the Tbp2 subunit of reference strain IM2394, by partial deletion of the first domain of said IM2394 type Tbp2 subunit.

60. A polypeptide according to claim 58, having an amino acid sequence which is derived from the sequence of the IM2394 type of Tbp2 subunit whose first, second and third domain are defined by maximal homology alignment with the sequence of the Tbp2 subunit of reference strain IM2394, by deletion of the region of the second domain of the IM2394 Tbp2 subunit which is homologous to the region of the second domain of the IM2394 Tbp2 subunit, extending form the amino

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acid in any one of positions 326 to 341 to amino acid in position 442.

61. A polypeptide according to claim 55, having an amino acid sequence which is derived from the sequence of the IM2394 type Tbp2 subunit whose first, second and third domains are defined by maximal homology alignment with the sequences of the Tbp2 subunit of reference strain IM2394, by partial deletion of the first domain of said IM2394 type Tbp2 subunit.

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62. A polypeptide according to claim 61, having an amino acid sequence which is derived from the sequence of the IM2394 type Tbp2 subunit whose first, second and third domains are defined by maximal homology alignment with the sequence of the Tbp2 subunit of reference strain IM2394, by deletion of all or part of the region which is homologous to the region of the first domain of said IM2394 type Tbp2 subunit, extending from amino acid in position 1 to amino acid in position 266.

63. A polypeptide according to claim 54, having an *D* amino acid sequence which is *obtained* from the sequence of the Tbp2 subunit of the transferrin receptor of a Neisseria meningitidis strain of type IM2169.

64. A polypeptide according to claim 63, having an *D* amino acid sequence which is *obtained* from the sequence of the IM2169 Tbp2 subunit.

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65. A polypeptide according to claim 63, having an amino acid sequence which is derived from the sequence of the IM2169 type Tbp2 subunit whose first, second and third domains are defined by maximal homology alignment with the sequence of the Tbp2 subunit of reference strain IM2169 by partial deletion of the second domain of said IM2169 type Tbp2 subunit.

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66. A polypeptide according to claim 65, having an amino acid sequence which is derived from the sequence of the IM2169 type Tbp2 subunit whose first, second and third domains are defined by maximal homology alignment with the sequence of the IM2169 Tbp2 subunit; by deletion of at least one of the regions of the second domain of the said IM2169 type Tbp2 subunit which are homologous to regions of IM2169 Tbp2 subunit, extending:

- (i) from amino acid in position 362 to amino acid in position 379;
- (ii) from amino acid in position 418 to amino acid in position 444;
- (iii) from amino acid in position 465 to amino acid in position 481;
- (iv) from amino acid in position 500 to amino acid in position 520.

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67. A polypeptide according to claim 66, having an amino acid sequence which is derived from the sequence of the IM2169 type Tbp2 subunit, whose first, second and third domains are defined by maximal homology alignment with the sequence of the IM2169 Tbp2 subunit, by deletion of the regions of the second domain of said IM2169 type Tbp2 subunit which are homologous to said regions (i) to (iv) of the IM2169 Tbp2 subunit.

68. A polypeptide according to claim 66 or 67, having an amino acid sequence which is derived from the sequence of the IM2169 type Tbp2 subunit whose first, second and third domains are defined by maximal homology alignment with the sequence of the Tbp2 subunit of reference strain IM2169 by partial deletion of the second domain of said IM2169 type Tbp2 subunit and which contains in full, the first and third domains of said IM2169 type Tbp2 subunit.

69. A polypeptide according to claim 66 or 67, having an amino acid sequence which is derived from the sequence of the IM2169 type Tbp2 subunit whose first, second and third

domains are defined by maximal homology alignment with the sequence of the Tpb2 subunit of reference strain IM2169 by partial deletion of the second domain, by partial or total deletion of the first domain and/or by partial or total deletion of the third domain of said IM2169 type Tpb2 subunit.

70. A polypeptide according to claim 63, having an amino acid sequence which is derived from the sequence of the IM2169 type Tpb2 subunit whose first, second and third domains are defined by maximal homology alignment with the sequence of the Tpb2 subunit of reference strain IM2169, by total deletion of the third domain and by partial or total deletion of the second domain of said IM2169 type Tpb2 subunit.

71. A polypeptide to claim 70, having an amino acid sequence which is derived from the sequence of the IM2169 type Tpb2 subunit whose first, second and third domains are defined by maximal homology alignment with the sequences for the Tpb2 subunit of reference strain IM2169, by total deletion of the third domain, by partial or total deletion of the second domain of said IM2169 type Tpb2 subunit and which contains in full the first domain of the sequence from which it is derived.

72. A polypeptide according to claim 70, having an amino acid sequence which is further derived from the sequence of the IM2169 type Tpb2 subunit whose first, second and third domains are defined by maximal homology alignment with the sequences of the Tpb2 subunit of reference strain IM2169, by partial deletion of the first domain of said IM2169 type Tpb2 subunit.

73. A polypeptide according to claim 71, having an amino acid sequences which is derived from the sequence of

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the IM2169 type Tbp2 subunit whose first, second and third domains are defined by maximal homology alignment with the sequence of the Tbp2 subunit of reference strain IM2169, by deletion of the region of the second domain of the said IM2169 type Tbp2 subunit which is homologous to the region of the second domain of the IM2169 Tbp2 subunit, extending from the amino acid in any one of positions 346 to 361 to amino acid in position 543.

74. A polypeptide according to claim 70, having an amino acid sequence which is derived from the sequence of the IM2169 type Tbp2 subunit whose first, second and third domains are defined by maximal homology alignment with the sequence of the Tbp2 subunit of reference strain IM2169, by partial deletion of the first domain of said IM2394 type Tbp2 subunit.

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75. A polypeptide according to claim 74, having an amino acid sequence which is derived from the sequence of the IM2169 type Tbp2 subunit whose first, second and third domains are defined by maximal homology alignment with the sequence of the Tbp2 subunit of reference strain IM2169, by deletion of all or part of the region which is homologous to the region of the first domain of said IM2169 type Tbp2 subunit, extending from amino acid in position 1 to amino acid in position 281.

76. A polypeptide according to claim 63, having an amino acid sequence which is derived from the sequence of the IM2169 type Tbp2 subunit whose first, second and third domains are defined by maximal homology alignment with the sequence of the Tbp2 subunit of reference strain IM2169, by partial or total deletion of the first domain and/or by partial or total deletion of the third domain of said IM2169

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type Tbp2 subunit and which contains in full, the second domain of said IM2169 type Tbp2 subunit.

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77. An isolated DNA fragment coding for a polypeptide according to claim 54.

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78. A pharmaceutical composition for inducing an immune response against N. meningitidis, comprising as active agent, at least one polypeptide according to claim 54.

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79. A monoclonal antibody:

(i) capable of recognizing an epitope present in the first domain of IM2169 or IM2394 type Tbp2 subunit; said epitope having a sequence homologous to the sequence present in the first domain of the Tbp2 subunit of strain IM2394 and selected from YKGTW, EFEVDFSDKTIGTL, EGGFYGPKGEEL and AVFGAK; and optionally

(ii) incapable of recognizing the epitope present in the third domain of said IM2169 or IM2394 type Tbp2 subunit, whose sequence is homologous to the sequence of the epitope of the first domain which is recognized.

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80. A monoclonal antibody according to claim 79,

(i) capable of recognizing the region present in the first domain of IM2169 or IM2394 type Tbp2 subunit whose sequence is homologous to the sequence EGGFYGPKGEEL, present in the first domain of the Tbp2 subunit of strain IM2394; and optionally,

(ii) incapable of recognizing the epitope present in the third domain of said IM2169 or IM2394 type Tbp2 subunit, which is an epitope

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equivalent to the epitope which is recognized and whose sequence is homologous to the sequence SGGFYGKNAIEM present in the third domain of the Tbp2 subunit of the strain IM2394.

81. A monoclonal antibody according to claim 80,
(i) capable of recognizing the epitope GFYGPK present in the first domain of a Tbp2 subunit of strain IM2394; and
(ii) incapable of recognizing the equivalent epitope present in the third domain of said IM2394 Tbp2 subunit.

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82. A pharmaceutical composition for treating a N. meningitidis infection by passive immunotherapy, which comprises as active agent, a monoclonal antibody according to any one of claims 79, 80 or 81.

REMARKS

Entry of the above-amendment is respectfully requested.

Respectfully submitted,

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